WMDT/CT Water Quality Evaluation

Actions: Staging, effectiveness and tradeoffs

- Operations-related water quality actions
- Water Quality Program (source control, advanced treatment methods, separation of water after export from the Delta)
- Exchanges

Comparisons

- CUWA intermediate and long-term targets for TOC, Br and TDS
- CALFED long-term targets
- Existing water quality

Possible interactions with biological actions

- Consistent: increase outflow in fall, reduce pumping in Jan.-Mar. (reduce TOC)
- Inconsistent: increase pumping in May-July, open cross channel in fall

Interaction with San Luis Reservoir

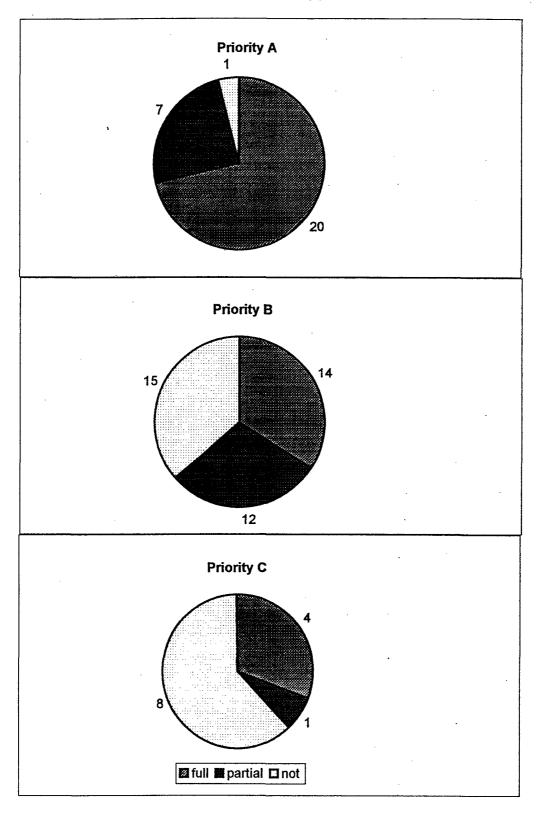
| Organic Carbo | on (mg/L) | |
|---------------|---------------------------------|-------|
| Game 1A | Annual Weighted Averages | |
| Water Year | Base | Final |
| 1981 | 3.6 | 3.5 |
| 1982 | 3.9 | 3.9 |
| 1983 | 3.3 | 3.3 |
| 1984 | 3.5 | 3.4 |
| 1985 | 3.7 | 3.6 |
| 1986 | 4.0 | 3.9 |
| 1987 | 3.6 | 3.6 |
| 1988 | 3.7 | 3.7 |

| Chloride (mg/l | _) | |
|----------------|-------------------------|-------|
| Game 1A | Annual Weighted Average | |
| Water Year | Base | Final |
| 1981 | 87 | 85 |
| 1982 | 37 | 37 |
| 1983 | 22 | 22 |
| 1984 | 29 | 29 |
| 1985 | 49 | 48 |
| 1986 | 55 | 50 |
| 1987 | 67 | 55 |
| 1988 | 106 | 101 |

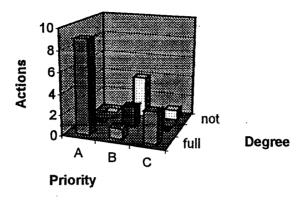
OVERARCHING QUALITATIVE RESULT

There was substantial effect on water quality, water supply, and fisheries under varying conditions.

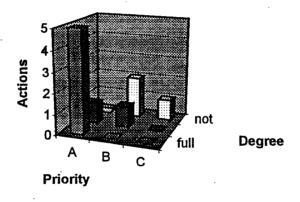
FISHERY ACTIONS ACCOMPLISHED WITH b(2) IN EARLY STAGE 1



April - May Salmon Actions with b(2) 1981-1989 31-Day VAMP Exports and "Shoulders"



Winter run salmon survival Dec - March with b(2) 1981-1989



Delta Smelt YOY April - July with b(2) 1981-1989

